

Stantec Analytical Validation Checklist**Report No. ATA97**

Project Name: Amtrak North Yard	Project Number: 213402048	
Validator: Steve Alberts	Laboratory: Eurofins/Lancaster Laboratory	
Date Validated: 12/16/2019	Laboratory Project Number: 2023150	
Sample Start-End Date 1/8/2016	Laboratory Report Date: 3/8/2016	
Parameters Validated: Polychlorinated biphenyls (PCBs) by EPA SW-846 3580A/8082		
Samples Validated: MH-14 (LLI # 8201740)		
VALIDATION CRITERIA CHECK		
Validation Flags Applicable to this Review: U The analyte was analyzed for, but not detected above the reported sample quantitation limit. J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample. J+ Result is estimated quantity but the result may be biased high. J- Result is estimated quantity but the result may be biased low. UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample. NJ The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. B The analyte was detected in the method, field, and/or trip blank. R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.		
1. Were all the analyses requested for the samples submitted with each COC completed by the lab?	Yes X	No
Comments:		
2. Did the laboratory identify any non-conformances related to the analytical result?	Yes X	No
Comments: Dilution and minor issues are noted in the narrative. Only issues requiring qualification are discussed in this report. Laboratory control sample spike recoveries that were out of control limits are discussed in section 11.		
3. Were sample Chain-of-Custody forms complete?	Yes X	No
Comments:		
4. Were samples received in good condition and at the appropriate temperature?	Yes X	No
Comments:		
5. Were sample holding times met?	Yes X	No
Comments:		

6. Were correct concentration units reported?	Yes X	No
Comments:		
7. Were detections found in laboratory blank samples?	Yes	No X
Comments: There were no target analytes detected in any laboratory blanks.		
8. Were detections found in field blank, equipment rinse blank, and/or trip blank samples?	NA X	No
Comments: No field blanks were submitted with this SDG.		
9. Were instrument calibrations within method criteria?	NA X	No
Comments: Not Applicable, Level II data validation.		
10. Were surrogate recoveries within control limits?	Yes X	No
Comments:		
11. Were laboratory control sample(s) (LCS/LCSD) sample recoveries within control limits?	Yes	No X
Comments: The LCS/LCSD recoveries for Aroclors 1016 and 1260 were exceeded the control limits published in the 2014 NFGs. Non-detect results for Aroclor 1016 were not qualified. Detected results for Aroclor 1260 were qualified as estimated with high bias (J+). Page 8 of the complete laboratory data deliverable package. Reason code: LCS, LCSD.		
12. Were matrix spike (MS/MSD) recoveries within control limits?	NA X	No
Comments: Site-specific MS and MSD were not performed.		
13. Were RPDs within control limits?	Yes X	No
Comments: LCS/LCSD RPDs were within the control limits published in the 2014 NFGs.		
14. Were dilutions required on any samples?	Yes X	No
Comments: Sample MH-14(05262016) required dilution prior to analysis at a dilution factor of 20X. Sample reporting limits were adjusted accordingly. No data were qualified.		
15. Were Tentatively Identified Compounds (TIC) present?	NA X	No
Comments: TIC not requested.		
16. Were organic system performance criteria met?	NA X	No
Comments: Not Applicable, Level II data validation.		

17. Were GC/MS internal standards within method criteria?	NA X	Yes	No
Comments: Not Applicable, Level II data validation.			
18. Were inorganic system performance criteria met?	NA X	Yes	No
Comments:			
19. Were blind field duplicates collected? If so, discuss the precision (RPD) of the results.		Yes	No X
Duplicate Sample ID	Primary Sample No.		
Comments:			
20. Were at least 10 percent of the hard copy results compared to the Electronic Data Deliverable Results?	Yes	No X	Initials SJA
Comments:			
21. Other?		Yes	No X
Comments: All samples were validated according to the USEPA 2014 NFGs and DNREC SOPCAP. All data are considered usable as qualified. No data have been rejected.			
PRECISION, ACCURACY, METHOD COMPLIANCE AND COMPLETENESS ASSESSMENT			
Precision:	Acceptable X	Unacceptable	Initials SJA
Comments:			
Sensitivity:	Acceptable X	Unacceptable	Initials SJA
Comments:			
Accuracy:	Acceptable X	Unacceptable	Initials SJA
Comments:			
Representativeness:	Acceptable X	Unacceptable	Initials SJA
Comments:			
Method Compliance:	Acceptable X	Unacceptable	Initials SJA
Comments:			
Completeness:	Acceptable X	Unacceptable	Initials SJA
Comments:			